

From glowbugs@theporch.com Sun Nov 3 09:45:12 1996  
Return-Path: <glowbugs@theporch.com>  
Received: from uro (localhost.theporch.com [127.0.0.1]) by uro.theporch.com  
(8.8.2/AUX-3.1.1) with SMTP id JAA08233; Sun, 3 Nov 1996 09:39:32 -0600 (CST)  
Date: Sun, 3 Nov 1996 09:39:32 -0600 (CST)  
Message-Id: <199611031539.JAA08233@uro.theporch.com>  
Errors-To: conard@tntech.campus.mci.net  
Reply-To: glowbugs@theporch.com  
Originator: glowbugs@theporch.com  
Sender: glowbugs@theporch.com  
Precedence: bulk  
From: glowbugs@theporch.com  
To: Multiple recipients of list <glowbugs@theporch.com>  
Subject: GLOWBUGS digest 340  
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas  
X-Comment: Please send list server requests to listproc@theporch.com  
Status: 0

#### GLOWBUGS Digest 340

Topics covered in this issue include:

- 1) 6BM8 transmitter and other stuff  
by lee@radioadv.com (Lee Richey)
- 2) Re: 6BM8 transmitter and other stuff  
by mjsilva@ix.netcom.com (michael silva)
- 3) Found: Two Good Books  
by mjsilva@ix.netcom.com (michael silva)
- 4) Re: 6BM8 transmitter and other stuff  
by "Brian Carling" <bry@mail1.mnsinc.com>
- 5) Spoken For: Two Good Books (and more...)  
by mjsilva@ix.netcom.com (michael silva)
- 6) regen question  
by Bob Roehrig <broehrig@admin.aurora.edu>
- 7) Re: Tube Reactivation Inf  
by ralph.hartwell@emachine.com (Ralph Hartwell)
- 8) What is a 10Y?  
by Gordon Gekko <gekko@nwlinc.com>

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Date: Sat, 2 Nov 1996 10:16:50 -0500  
From: lee@radioadv.com (Lee Richey)  
To: <glowbugs@theporch.com>  
Subject: 6BM8 transmitter and other stuff  
Message-ID: <19961102160014133.AAA213@lee.radioadv.com>

Hello,

I guess I'm one of those lurkers. :-) Lot's of reading but very little writing.  
Sorry!

My interests vary from state-of-the-art solid state designs to equipment and designs from pre and post WWII era. I have a OHR 100-40 QRP rig, various Ten-Tec rigs including a Corsair II (great rig) and a Paragon, and several Hallicrafters, Hammarlund, Heath and Johnson pieces.

I get a big kick out of using the tube equipment but I miss the smoooooth Ten-Tec QSK. So, I built a full break-in keying system for the tube equip that works just about as well as the T-T.

Now I'm planning a little 10-15 watt input crystal rig. I hav a couple 6BM8's in the junk box. Does anyone here know how well the 6BM8 works at RF? It was specifically designed for audio I believe. Most audio tubes work just fine on RF, but a few do not because of internal lead length etc. Looks like it would make a pretty nice little rig. I'm planning to have pretuned pi-net output so I can switch bands without putting up a carrier for tune-up. (That's one nice thing the SS rigs have produced, lots less tuners-uppers)

By way of disclaimer, I must say I am involved with Radio Adventures Co., a producer of ham radio kits. That makes me a little un-easy when posting since I don't want to commercialize my posts but I do like to talk a little about the stuff I'm doing as well as what others are doing. If I get out of line, please let me know. :-).

-73- -Lee- -WA3FIY-

<http://www.radioadv.com>

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Date: Sat, 2 Nov 1996 10:03:34 -0800  
From: mjsilva@ix.netcom.com (michael silva)  
To: glowbugs@theporch.com  
Subject: Re: 6BM8 transmitter and other stuff  
Message-ID: <199611021803.KAA13498@dfw-ix10.ix.netcom.com>

>Now I'm planning a little 10-15 watt input crystal rig. I hav a  
>couple 6BM8's in the junk box. Does anyone here know how well the

>6BM8 works at RF?

I'd be very surprised if it didn't work just fine. It's specs remind me of the 6GW8 (also a mini audio triode/power pentode), and I've seen that used in TXes like the one you're considering.

73,  
Mike, KK6GM

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Date: Sat, 2 Nov 1996 10:31:38 -0800  
From: mjsilva@ix.netcom.com (michael silva)  
To: glowbugs@theporch.com  
Subject: Found: Two Good Books  
Message-ID: <199611021831.KAA04156@dfw-ix11.ix.netcom.com>

Hi all,

A used book store I frequent has had two nice glowbug books sitting around for a while (only reason I didn't buy them is that I've already got them both), and I thought some of you might be interested:

One is a 1948 ARRL Handbook. Cover is fair, inside is good. This one has the one- and two-tube transmitters built on wood slats that were discussed a while back, as well as a couple of nice receivers and lots of higher-power stuff. They want \$12 for it.

The other is Terman's Electronic and Radio Engineering (1955). Terman is one of the biggies of the era. This book is the fourth edition of his book Radio Engineering, first written in 1932. It's almost 1100 pages, with chapters on, e.g., amplifiers (audio, video, tuned voltage, tuned power), oscillators, modulation, detectors and mixers, etc. A very good book to get the basics of vacuum tubes down. Good condition inside and out with the exception of a small faint stain on the outer 1/4 inch or so of some pages. They want \$15 for it.

If anybody is interested in either of these, I'll pick them up and ship them to you, and you pay the cost plus shipping.

73,  
Mike, KK6GM

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Date: Sat, 2 Nov 1996 11:34:33 +0000

From: "Brian Carling" <bry@mail1.mnsinc.com>  
To: lee@radioadv.com (Lee Richey), glowbugs@theporch.com  
Subject: Re: 6BM8 transmitter and other stuff  
Message-ID: <199611021933.0AA05502@user2.mnsinc.com>

HEY! It's a reply from AF4K!  
On 2 Nov 96, Lee Richey wrote:

> I get a big kick out of using the tube equipment but I miss the  
> smoooooth Ten-Tec QSK. So, I built a full break-in keying system for  
> the tube equip that works just about as well as the T-T.

That T-T QSK is really great! I miss it - been years since I operated  
a Ten Tec. I had the use of one for a while once. SO nice on CW!

You had a QSK circuit on TUBE equipment?  
I hated how Heath did it on the HW-16 with neon bulbs doing the  
switching. There HAS to be a better way!  
I am building up a small tube xmtr here also with a planned power of  
1 to 25 watts output on 40m and 80m CW.  
I may go to other bands too but that is the plan for now.  
I am going to stay with a commercial receiver, and I would dearly  
LOVE to be able to run the thing QSK!

HOW did you do it? Is there any way that you could share with us  
about the circuitry?

> I'm planning to have pretuned pi-net output so I can  
> switch bands without putting up a carrier for tune-up.

Now THERE's another great idea! Seems like all it would take is the  
right kind of switch and some means of getting the right capacitances  
..

> By way of disclaimer, I must say I am involved with Radio Adventures  
> Co., a producer of ham radio kits. That makes me a little un-easy  
> when posting since I don't want to commercialize my posts but I do  
> like to talk a little  
> about the stuff I'm doing as well as what others are doing. If I  
> get out of line, please let me know. :-).

Lee I am just GLAD that you told us what you are involved with.  
I have your co. listed on my website. Now I have an <http://www> I can  
add to the information! If you like - e-mail me with some more  
information about your product plans too!

73 & happy hamming - Bry

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\*\*\* 73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA \*  
\*\* E-mail to: bry@mnsinc.com \*  
\*\*\* See the great ham radio resources at: \*  
\*\* <http://www.mnsinc.com/bry/> \*  
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Date: Sat, 2 Nov 1996 15:14:07 -0800  
From: mjsilva@ix.netcom.com (michael silva)  
To: glowbugs@theporch.com  
Subject: Spoken For: Two Good Books (and more...)  
Message-ID: <199611022314.PAA19498@dfw-ix9.ix.netcom.com>

Happy to report both books will be going to good homes. Should anything else turn up I'll be sure and give a yell.

Now, for something entirely different...

I've got a NIB 6CD6 sweep tube that should make a nice glowbug PA in the 25-50 watt range. (20w plate diss.) I don't have a need for it, so I'd like to give it, along with a 6AG7, to somebody who will build up a nice little Novice-style rig out of them, especially somebody who has not (at least recently) built a tube transmitter. I'm sure I can also dig up a schematic or two to go along. No catch, just trying to spread the glowbug spirit.

73,  
Mike, KK6GM

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Date: Sat, 2 Nov 1996 17:56:34 -0600 (CST)  
From: Bob Roehrig <broehrig@admin.aurora.edu>  
To: glowbugs <glowbugs@theporch.com>  
Subject: regen question  
Message-ID: <Pine.ULT.3.95.961102174904.10809A-1000000@admin.aurora.edu>

I dug out my old "Autodyne-2" that I built last year and was trying to improve performance. Even with an audio stage, I was not really impressed with the output. Well, The regen stage is a 6AU6 and I had the plate running off 70 volts. It plays much better with 130V.

The regen stage is a shunt fed Hartley: Tapped coil - one end ground, tap going to cathode via .01 cap (cathode grounded via 2.5mH RF choke), hot end of coil goes to grid thru 75pf with 5.6Meg from grid to GRD.

The regen control is a 50K pot from B+ to GRD. .2 uf bypass on screen. Regen control is smooth, however my question is this: Slightly beyone the regen point, the thing breaks into a lower freq oscillation - about 700KC to 2 MC, depending how far I crank up the regen. This happens on all the plug-in coils, BC band thru 30 meters. Any idea what's causing this? I'll say one thing for it - since it is kinda acting like a super-regen, it gets very hot. I can hear WWV at 10 megs with no antenna! But the howling beats sure get to you.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI  
CIS: Data / Telecom Aurora University, Aurora, IL

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Date: Sun, 3 Nov 1996 05:43:00 GMT  
From: ralph.hartwell@emachine.com (Ralph Hartwell)  
To: glowbugs@theporch.com  
Subject: Re: Tube Reactivation Inf  
Message-ID: <9611030014506197@emachine.com>

W>I'm not quite sure what you mean by "the cathode is only emitting electrons  
W>from a few areas ...." I envision the tube being a filament type without a  
W>separate cathode and the emission from the filament being purely from the  
W>filament as a piece of hot tungsten without any thorium or other aids to  
W>emission. I believe that any remaining thorium would be quickly driven off  
W>at the higher operating temperature 2500 to 2600 degrees K versus 1950 to  
W>2000 degrees K for the thoriated filament. There's probably more to it than  
W>my simplified view and I just wondered if you had any more details?

While it's true that this is essentially the case, it usually turns out that as the tube ages, there will inevitably be a few small areas on the filament where electrons will be emitted much better than others.

If one of those places happens to be near the end of the grid structure or directly between the turns of the grid winding in the case of a coarsely wound grid, the electrons may get to the plate without the grid having enough control over the electron stream. The result is that you have rated plate current, but poor amplification and low power output with lots of distortion. 5-500A power tubes are notorious for that.

If you can remove the thorium from the filament, you will come close to approximating a pure Tungsten type filament, however, I do not know if the bare filament will be close enough in surface composition to a

pure Tungsten filament to work properly. Still, it has possibilities!

W>emission. I believe that any remaining thorium would be quickly driven off  
W>at the higher operating temperature 2500 to 2600 degrees K versus 1950 to  
W>2000 degrees K for the thoriated filament. There's probably more to it than  
W>my simplified view and I just wondered if you had any more details?

W>p.s. I wouldn't try this on a power tube unless I was really desperate.

Ralph

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, QMPro 1.53 , A great day for putting slinkies on an escalator

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Date: Sun, 3 Nov 1996 00:27:07 -0800 (PST)  
From: Gordon Gekko <gekko@nwlink.com>  
To: glowbugs@theporch.com  
Subject: What is a 10Y?  
Message-ID: <199611030827.AAA14428@montana.nwlink.com>

Hi GB'ers,

I just found an old box of tubes from my childhood days, and amongst the treasure trove of 6V6, 6AG7's and the like is a couple of an 'antique' tubes labeled '10Y'. 4-pin base, and about the size of the largest 6L6 package.

Does anyone know what this tube is and have any good GB ideas for it?

Thanks

ps - to all who requested schematics - hang tight! The copyright situation may be worked out soon and I'll send them on when we know it's legal to do so.

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End of GLOWBUGS Digest 340  
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